



## Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact [support@jstor.org](mailto:support@jstor.org).

# CURRENT LITERATURE.

## BOOK REVIEWS.

### Goebel's *Organography*.<sup>1</sup>

THE second volume of this notable work has appeared recently. It deals with the gametophyte and sporophyte of pteridophytes, and with the sporophyte of spermatophytes. The gametophyte of the pteridophytes is discussed under two heads, namely, (1) structure and development of the sex organs, and (2) the form of the prothallia. In discussing the development of antheridia the author advances views which are at variance not only with those of Belajeff and others, but also with his own previous accounts. In *Isoetes*, after the cutting off of the small cell which Belajeff has called the rhizoidal cell, two oblique walls divide the main body of the spore into two flat cells and a larger cell which is triangular in optical section. This last cell alone the author regards as the antheridium initial. It divides by a periclinal wall into an outer cover cell, and an inner cell, the latter of which by further division gives rise to four cells in each of which a spermatozoid is organized. According to this interpretation there is within the spore wall a prothallium consisting of three sterile cells and one antheridium, and only the cover cell can be regarded as belonging to the antheridium wall.

In presenting the development of both the antheridia and the archegonia the transition from free to imbedded organs is described in some detail. The prothallia of *Ophioglossum*, *Botrychium*, and *Lycopodium* receive particular attention on account of their biological importance. The vegetative multiplication of prothallia is another interesting subject which is somewhat fully treated.

In the second part of the book, which is devoted to the sporophyte of pteridophytes and spermatophytes, the various organs are discussed in great detail. The account of the embryo is particularly helpful. Among other interesting subjects are the transition between leaf and shoot, leaf formation the relation between venation and leaf development, transformed leaves, branching, etc.

The treatment throughout is dominated by what may be called experimental morphology, and the book cannot fail to have a good influence in

<sup>1</sup>GOEBEL, K.: *Organographie der Pflanzen insbesondere der Archegoniaten und Samenpflanzen*. Zweiter Teil. *Specielle Organographie*. 2 Heft: Pteridophyten und Samenpflanzen. Erster Teil. 8vo., pp. xiii-xvi + 385-648. 173 illustrations. Jena: Gustav Fischer. 1900. *M* 7.

relaxing the too rigid notions of morphology which are still prevalent. While constantly calling attention to the variation which occurs in nature and which may also be brought about artificially, the author also recognizes that environment is not the only factor in plant development, but that heredity is equally important. Representing as it does the work which is being carried on in the author's laboratory, the book has the freshness of research, and is full of suggestions to those engaged in morphological investigation.

Those who have read the first part will be glad to learn that the present volume is not so difficult. An early English translation is announced.—CHARLES J. CHAMBERLAIN.

### MINOR NOTICES.

THE SIXTH FASCICLE of Wildeman and Durand's *Illustrations de la flore du Congo* has appeared recently, containing plates 61 to 72 inclusive. This elaborate work, with its very handsome plates, needs no further commendation than has been given already in this journal.—J. M. C.

THE SECOND FASCICLE of Schumann's *Blühende Kakteen* (Iconographia Cactacearum) has appeared recently. It contains descriptions and beautiful colored illustrations of *Mamillaria Wissmannii* Hildmann, *M. raphidacantha* Lem., *Echinocactus horripilus* Lem., and *E. Mathssonii* Berge. The publisher is J. Neumann in Neudamm, and the price is four marks.—J. M. C.

THE SECOND VOLUME of *Primitiae Florae Costaricensis*, under the editorship of H. Pittier, bearing date 1898–1900, has appeared in seven fascicles. The collaborators are J. Donnell Smith (Polypetalae and Gamopetalae), Casimir DeCandolle (Piperaceae), G. Lindau (Acanthaceae), F. Pax (Euphorbiaceae), and A. Engler (Araceae). Numerous new species are described, but the only new genus published is *Kolobohilus* (Acanthaceae).—J. M. C.

THREE FASCICLES of the first volume of Engler and Prantl's *Nat. Pflanzenfamilien* have appeared recently, as follows: 204 contains the conclusion of fossil Filicales and the Sphenophyllales by H. Potonié, and the beginning of the living Equisetales by R. Sadebeck; 205 contains the conclusion of the living Equisetales by R. Sadebeck, the fossil forms by H. Potonié, and the beginning of the Lycopodiaceae by E. Pritzel; 206 contains the conclusion of the Lycopodiaceae and the Psilotaceae by E. Pritzel, the Psilotaceae by H. Potonié, and the beginning of Selaginellaceae by G. Hieronymus.—J. M. C.

A. M. FERGUSON (Twelfth Ann. Rep. Mo. Bot. Gard. 33–73. pls. 4–31. 16 F 1901) has published a revision of the species of *Croton* found in the United States. It seems to be a painstaking and judicious piece of work, and deals with a genus which greatly needed revision. Thirty-three species and varieties are recognized, all of which are illustrated. The conservative spirit of the work is indicated by the fact that in a genus of great possibilities only one new species is described, and five forms are made new varieties.